

REMARKS

Claims 1-10, 11-28 and 30-38 are pending in the application. The Examiner is respectfully requested to reconsider and withdraw the objections and rejections in view of the amendments and remarks herein.

Claim Objections

Claims 6, 19 and 20 stand objected to. More specifically, the Examiner has noted that claim 6 depends from claim 4, however, the claims do not address the same limitation. The Examiner has also noted that claims 19 and 20 depend on claim 1 ("the computer program product of claim 1"), while claim 1 does not address a computer program product.

Claim 6 has been amended to depend from claim 3, which includes the feature of modifying an empty state model. Each of claims 19 and 20 have been amended to replace the phrase "computer program product" with "method". Accordingly, reconsideration and withdrawal of the rejections are respectfully requested.

Claim Rejections – 35 USC § 102

Claims 1, 13-16, 18, 21, 30, and 31 stand rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 5,671,362 to Crowe et al. ("Crowe"). This rejection is respectfully traversed.

Applicants note that, when applying a reference under 35 U.S.C. §102, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference."¹ Further, "[t]he identical invention must be shown in as complete detail as is contained in the ... claim."² As discussed in further detail below, Crowe fails to set forth each and every element as is contained in either claim 1 or claim 10, and fails to show the method and apparatus in as complete detail as is contained in claims 1 and 10, respectively.

Each of claims 1 and 21, as amended herein, include the features of comparing initial and current state output signals to determine a load change on a load storage device, and determining

¹ *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

² *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

an identity of an item associated the load storage device from a plurality of items potentially included in a load positioned upon the load storage device based on the load change. By way of non-limiting example, and as described in further detail in Applicants' disclosure, a plurality of items potentially included in a load can be provided as 10.00 kilogram cases of oranges or 7.00 kilogram cases of lemons. Consequently, if the load change is an increase of 7.00 kilograms, for example, it can be determined that an item was added to the load storage device, and that the identity of the item is a case of lemons, because the only items that can be added to load storage device, and that weighs 7.00 kilograms is a case of lemons (see page 5, lines 11-22 of the original specification).

Crowe fails to disclose at least the features of comparing initial and current state output signals to determine a load change on a load storage device, and determining an identity of an item associated the load storage device from a plurality of items potentially included in a load positioned upon the load storage device based on the load change.

Crowe is directed to a materials monitoring system that includes an electronic shelf unit 10 that can sense and report product usage or withdrawals, by sensing the presence or absence of product items 30 in storage on the shelf unit (see col. 5, lines 37-40, for example). More specifically, the shelf unit 10 includes a sensing grid 32 that comprises an array of sensor, such as pressure transducers, that are sensitive to the weight and form of a product item 30 (see col. 8, lines 1-5). The presence or absence of a product item can be determined based on signals from the sensing grid 32.

Further, Crowe explicitly provides that each of the product items 30 includes a machine-readable label 31 (e.g., a bar code). The system of Crowe also provides that an item identifier is entered for each product item 30 placed on the shelf unit 10 by scanning the machine-readable label 31 (see col. 11, lines 33-37). Consequently, Crowe does not determine a load change and identity of a product item 30 by comparing the load change to a plurality of product items 30 potentially included in a load positioned on the shelf unit 10. As explicitly provided in Crowe, the identity of a particular product item 30 associated with the shelf unit 10 is determined by scanning the machine-readable label 31.

For at least the reasons discussed in detail above, Crowe fails to set forth each and every element as is contained in either claim 1 or claim 21, and fails to show the method and product in

as complete detail as is contained in claims 1 and 21, respectively. Consequently, Crowe fails to anticipate either the method or the product of claims 1 and 21, respectively, and reconsideration and withdrawal of the rejections are respectfully requested.

Each of claims 13-16, 18, 30 and 31 ultimately depends from one of claims 1 and 21, which define over the asserted reference, as discussed in detail above. Consequently, each of claims 13-16, 18, 30 and 31 also define over the asserted reference for at least the same reasons. Therefore, reconsideration and withdrawal of the rejections are respectfully requested.

Claim Rejections – 35 USC § 103

Claims 2-9, 12, 19, 20, 22-27, 32, and 33 stand rejected under 35 U.S.C. 103(a) as being obvious over Crowe in view of U.S. Pat. No. 4,674,605 to McPherson et al. ("McPherson"). Claims 10-12, 28, and 29 stand rejected under 35 U.S.C. 103(a) as being obvious over Crowe in view of McPherson, in further view of Official Notice. Claim 13 stands rejected under 35 U.S.C. 103(a) as being obvious over Crowe in view of McPherson, in further view of U.S. Pat. No. 6,450,299 to Lysaught ("Lysaught"). These rejections are respectfully traversed.

At the outset, Applicants note that claims 11 and 29 have been cancelled without prejudice or disclaimer of the subject matter therein. Consequently, the rejection of claims 11 and 29 has been rendered moot.

Each of claims 2-10, 12, 13, 19, 20, 22-28, 32, and 33 ultimately depends from one of claims 1 and 21, which define over the asserted reference, as discussed in detail above. Consequently, each of claims 2-10, 12, 13, 19, 20, 22-28, 32, and 33 also defines over the asserted reference for at least the same reasons. Therefore, reconsideration and withdrawal of the rejections are respectfully requested.

With regard to the subject matter of original claims 10-12, 28 and 29, in particular, the Examiner has asserted that "it is common in the art to compare the new load weight with the newly loaded item weight and also [i]t is also common to select an item of interest from the load." The Examiner then states that "the Examiner takes Official Notice that it would have been obvious to a person of ordinary skill in the art to compare weights and select items in order to justify and verify the change in load." (see Office Action, paragraph 6 on page 7). As

discussed in further detail below, the Examiner's use of an official notice is improper and is unsupported.

As provided in §2144.03 of the MPEP, "[o]fficial notice unsupported by documentary evidence should only be taken by the examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known."³ More specifically, the notice of facts beyond the record which may be taken by the examiner must be "capable of such instant and unquestionable demonstration as to defy dispute."⁴ Further, "[i]f such notice is taken, the basis for such reasoning must be set forth explicitly. The examiner must provide specific factual findings predicated on sound technical and scientific reasoning to support his or her conclusion of common knowledge."⁵

Applicants respectfully note that the features described in original claims 10-12, 28 and 29 are not so common knowledge that they are capable of instant and unquestionable demonstration as being well-known. Further, Applicants respectfully note that the Examiner has not sufficiently set forth the basis for the official notice. More specifically, the Examiner has not provided specific factual findings predicated on sound technical and scientific reasoning to support the conclusion of common knowledge. Instead, the Examiner has merely recited an abridged description of the claim features and has asserted such as being common knowledge.

For at least the foregoing reasons, the Examiner's use of an official notice with regard to the features of original claims 10-12, 28 and 29 is improper and is unsupported.

Claims 34-38 stand rejected under 35 U.S.C. 103(a) as being obvious in view of the combination of Crowe and U.S. Pub. No. 2004/0139806 to Christmas ("Christmas").

Claim 34 includes the features of a database operable to store a plurality of load records, each load record corresponding to an item type, and a load monitoring system operable to input the load signals and access the database, to thereby output the item type corresponding to the load based on the load records. Again by way of non-limiting example, the system of claim 34 enables the database to include, for example, a plurality of items potentially included in a load can be provided as 10.00 kilogram cases of oranges or 7.00 kilogram cases of lemons.

³ MPEP §2144.03 at page 2100-145.

⁴ *id.*, citing *In re Ahlert*, 424 F.2d at 1091, 165 USPQ at 420-21.

⁵ *id.*, citing *In re Soli*, 317 F.2d at 946, 37 USPQ at 801, and *In re Chevenard*, 139 F.2d at 713, 60 USPQ at 241.

Consequently, if the load change is an increase of 7.00 kilograms, for example, the system of claim 34 can determine that an item was added to the load storage device, and that the identity of the item is a case of lemons, because the only items that can be added to load storage device, and that weighs 7.00 kilograms is a case of lemons (see page 5, lines 11-22 of the original specification).

As discussed in further detail below, Crowe fails to disclose at least the features of a database operable to store a plurality of load records, each load record corresponding to an item type, and a load monitoring system operable to input the load signals and access the database, to thereby output the item type corresponding to the load based on the load records. As also discussed in further detail below, Christmas fails to cure the deficient disclosure of Crowe.

As discussed in detail above, Crowe describes a materials monitoring system that includes an electronic shelf unit 10 that can sense and report product usage or withdrawals, by sensing the presence or absence of product items 30 in storage on the shelf unit. Further, Crowe explicitly provides that an item identifier is entered for each product item 30 placed on the shelf unit 10 by scanning the machine-readable label 31. Consequently, Crowe does not access using load signals to thereby output the item type corresponding to the load based on the load records.

Christmas describes a load monitoring and inventory management system for use with a load conveyor. More specifically, Christmas describes a sensor unit S that is attached to a load component of load handling vehicle 1 (e.g., a forklift truck). As described in detail in paragraph [0048] of Christmas, and with reference to Fig. 6, a bar code reader 26 is used to read bar code data from a bar code 40 that is affixed to each load L, and can include coded information such as the load type, the mass of each individual part making up the load, part number and order number. When a load is collected, the bar code 40 is read and the data is transmitted to a processor 30. A memory associated with the processor 30 is pre-programmed with a look-up table containing the weight of each individual item that might be stored in the warehouse. When the load L is being transported, the sensor unit S measures the magnitude of the load and the data is passed to the processor 30, which uses the look-up table to identify the weight per item of the load type that has been read from the bar code. The processor 30 then calculates the number of items making up that load from the measured load magnitude and this value is stored.

Accordingly, Christmas implements a bar code scanning process to determine the item type of the load being transported. Once the item type is determined using the bar code scanning process, the weight of an item for that item type is determined from the information stored in memory, and the total load weight is divided by the weight per item to determine the number of items being transported. Consequently, Christmas fails to describe determining the item type based on the load of the particular item.

As discussed in detail above, neither Crowe nor Christmas, taken either alone or in combination, disclose all of the features of claim 34. Therefore, reconsideration and withdrawal of the rejection are respectfully requested.

Each of claims 35-38 ultimately depends from claim 34, which defines over the asserted reference, as discussed in detail above. Consequently, each of claims 35-38 also defines over the asserted reference for at least the same reasons. Therefore, reconsideration and withdrawal of the rejections are respectfully requested.

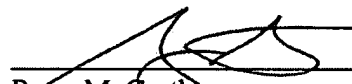
CONCLUSION

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reason for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to amendment. Applicants respectfully request consideration of all filed IDS' not previously considered, by initialing and returning each Form 1449.

No charges are believed due. However, if any fees are due, they are being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply all charges or credits to Deposit Account No. 06-1050, referencing Attorney Docket No.13909-141001.

Respectfully submitted,

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